Diplusodon bolivianus sp. nov. (Lythraceae), the First Report of the Genus for Bolivia

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ABSTRACT. Diplusodon bolivianus, a new species from Dept. Santa Cruz, Bolivia, is described and illustrated. Comparison is made to D. hirsutus, which it most closely resembles in floral morphology. This is the first report of Diplusodon for Bolivia and the first record of the genus occurring outside Brazil.

Diplusodon is a genus of showy, often highly floriferous shrubs until now considered endemic to Brazil. A new monograph recognizes 59 species, without infrageneric divisions (Cavalcanti, 1995). The genus is most diverse in the savannas and campos rupestres of the states of Goias and Minas Gerais, especially in the Serra Geral do Paraná of Goias and the Cadeia do Espinhaço of Minas Gerais. A collection made in Parque Nacional Noel Kempff Mercado, Dept. Santa Cruz, Bolivia, records the presence of Diplusodon outside Brazil for the first time. The specimens represent a new species that is most similar in its floral characters to D. hirsutus (Chamisso & Schlechtendal) DC. of Minas Gerais and Bahia.

Diplusodon bolivianus T. Cavalcanti & S. A. Graham, sp. nov. TYPE: Bolivia. Santa Cruz: Velasco, Parque Nacional Noel Kempff M., Campamento Las Gamas, mosaico de cerrado, campo rupestre, pampas humedas y bosque de galeria, 14°49′S, 60°23′W, 900 m, 28 Mar. 1993, Killeen, Panfil & Arroyo 4845 (holotype, MO; isotypes, CEN, KE-Graham). Figure 1A–J.

Habitu D. oblongo Pohl similis. A D. hirsuto (Chamisso & Schlechtendal) DC. foliis eucamptodromis ellipticis latioribus, indumento paginarum inferiorum et superiorum densiore, inflorescentia frondo-bracteosa, staminibus sepalis brevioribus differt.

Shrubs 1.5 m, branchlets subquadrangular, all parts densely and finely hirsute to sericeous, the hairs simple, pale yellow to white, to 0.5 mm long. Leaves petiolate, petioles 1.0–6.0 mm; blades 20.0–

40.0 × 9.0-20.0 mm, crowded and overlapping distally on short axillary branches, chartaceous, eucamptodromous, elliptic to broadly elliptic, venation eucamptodromous, apex obtuse, minutely acuminate, base acute, margin often subrevolute, slightly ciliate, adaxial surface sparsely hirsute, abaxial surface more densely hirsute, lateral vein pairs 4-6, adaxially inconspicuous, abaxially more prominent, raised, brown in dry state. Inflorescences distinctly terminal, compound with racemose, short, axillary co-inflorescences (diplobotrys), foliage leaves gradually but conspicuously reduced acropetally to form the bracts of the inflorescence (frondo-bracteose); flowers crowded on pedicels 0-1 mm long; bracteoles (prophylls) 3.2-3.8 × 1.0-2.5 mm, oblong to obovate, densely hirsute abaxially, extending to about midpoint of the floral tube. Floral tubes 4.5-6.0 × 4 mm, campanulate, densely hirsute to sericeous; sepals 6, ca. 1.5 mm long, glabrous within; appendages of the epicalyx 1.0-1.5 mm long, less than or equal to the length of the sepals, triangular, spreading, sometimes curved or in-rolled at the tips; petals 6, 6.0-8.0 \times 4.0-5.0 mm, elliptic, rose; stamens 12, included to scarcely exserted; ovary 3.0 × 2.8-3.0 mm, glabrous; style 5.5-6.0 mm long, long-exserted; stigma capitate; ovules 13-17. Capsules rounded, brownish red; seeds 3-11, $1.8-2.0 \times 1.5-1.9$ mm.

Phenology. Probably flowering at least from January to March; collected in fruit in March.

Distribution. Known only from the margin of a gallery forest and the adjacent cerrado in Parque Nacional Noel Kempff M., Campamento Las Gamas, at 900 m.

Among the species of *Diplusodon* with pinnately veined leaves, appendage-bearing campanulate floral tubes, and rounded capsules, *Diplusodon bolivianus* is distinguished by a pale yellow to whitish, densely hirsute to sericeous indument, and 12 stamens that are included or scarcely exceed the se-

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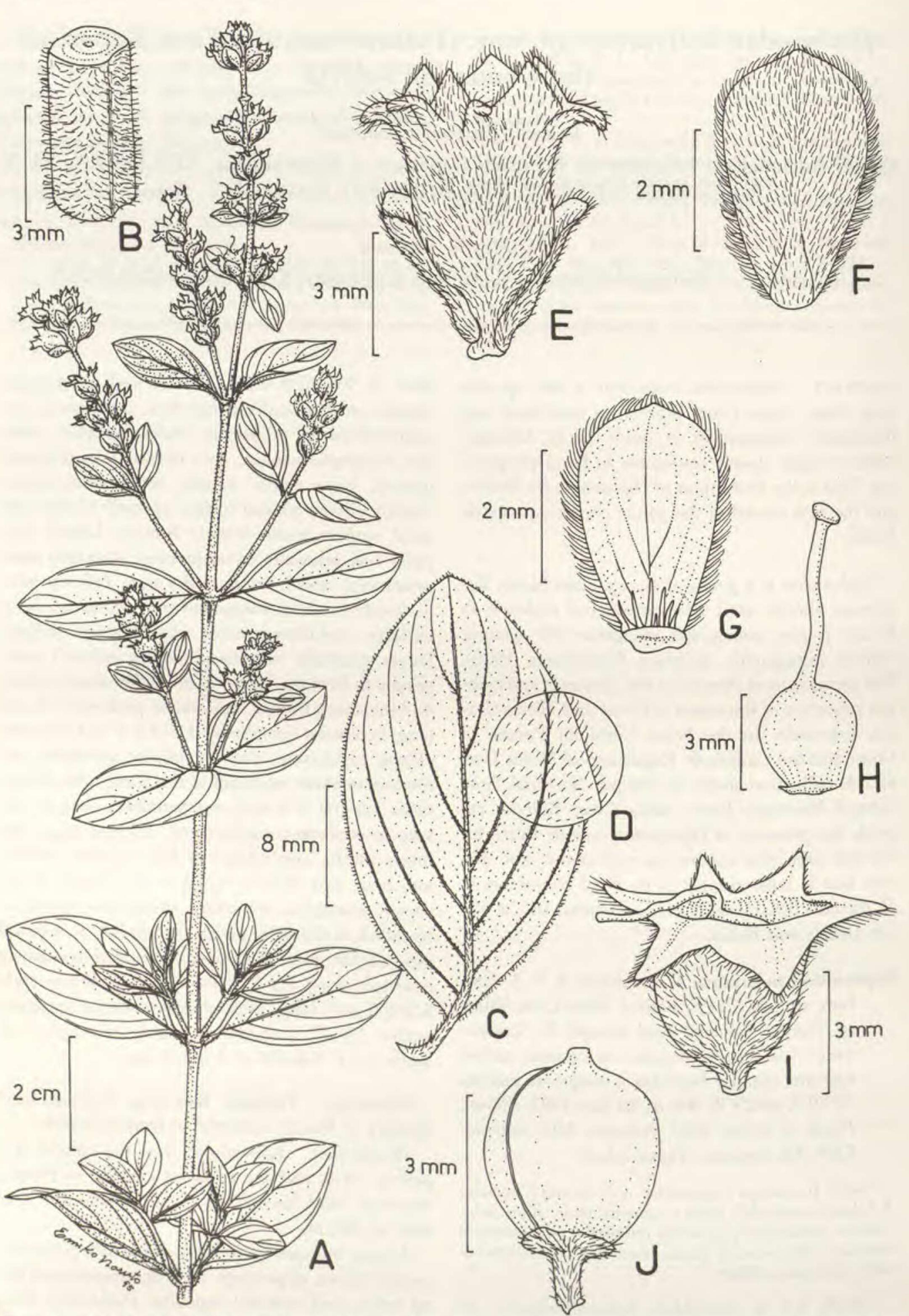


Figure 1. Diplusodon bolivianus T. Cavalcanti & S. A. Graham. —A. Branch of the inflorescence. —B. Section of an internode. —C. Leaf, abaxial surface. —D. Detail of leaf indument. —E. Floral tube, without petals. —F. Bracteole, abaxial surface. —G. Bracteole, adaxial surface, with dissected stipules at the base. —H. Pistil. —I. Persistent floral tube surrounding the mature capsule. —J. Capsule. Drawn from the isotype at CEN.

pals. The new species resembles *D. oblongus* vegetatively, especially by its similar basic leaf venation pattern, leaf shape and size, and by its more or less distinct terminal bracteate inflorescence. In the floral morphological features important for establishing natural relationships, however, it most closely resembles *D. hirsutus*—and within this highly variable species, those plants with large leaves and consistently subrevolute leaf margins. *Diplusodon hirsutus* differs from *D. bolivianus* by a leafier, more extended inflorescence (frondose in *D. hirsutus* vs. frondo-bracteose in *D. bolivianus*), narrower less hirsute leaves with acrodromous leaf venation, and 12–15 stamens that extend well beyond the sepals. The species are geographically separat-

ed by approximately 1800 km. Seven other species of *Diplusodon* grow in Mato Grosso, Brazil, in much closer proximity to *D. bolivianus*, but none resemble *D. bolivianus* as closely as does *D. hirsutus*.

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Literature Cited

Cavalcanti, T. B. 1995. Revisão de *Diplusodon* Pohl (Lythraceae). Doctoral Dissertation, University of São Paulo, São Paulo, S.P., Brazil.